A method for early warning of a potential SARS-CoV-2 outbreak

Studies have established that wastewater can be used as a lead indicator of SARS-CoV-2 infection in a population. Regular and ongoing monitoring of wastewater effluent can provide an early indication of an outbreak, possibly even while the population in question is asymptomatic but potentially contagious.

SARS-CoV-2 can be found up to 3 days in advance of symptoms through wastewater testing

Wastewater sampling is a non-invasive and cost-effective mechanism to monitor the evolution of the SARS-CoV-2 pandemic. As part of the Eurofins Sentinel™ program, wastewater testing can be organized with minimal disruption.

Eurofins has developed wastewater testing:

- That detects and confirms SARS-CoV-2 by targeting two genome sequences in accordance with WHO recommendations.
- Is highly sensitive – Studies have shown that 1 infected person out of a community of over 1000 persons is detectable.

www.EurofinsUS.com/COVIDWW | COVIDWW@EurofinsUS.com
Results
Test results are reported qualitatively as “Detect” or “Not Detect” along with the semi-qualitative Cycle Threshold (Ct) score that can be used as an indication of viral load over time.

Results are provided within 48 hours of sample receipt.

Sampling and Shipping
Untreated wastewater samples should be collected from the waste stream or collection point at a flow-proportional or time-dependent frequency using a composite auto-sampler (e.g. Teledyne ISCO). A subsample is then taken from the composite and decanted to a supplied 250 ml bottle. Once bottled, samples should be chilled. Samples should be expedited in the provided shipping container with ice packs (return label provided) to the following address:

**Eurofins QC**
702 Electronic Drive
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215-355-3900